Virginia Department of Health Office of Emergency Medical Services Retention Project

Keeping The Best How To Leverage Retention of Virginia's EMS Professionals

Research Phase Report

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Executive Summary

The Virginia Department of Health, Office of Emergency Medical Services has initiated a project to improve the retention of volunteer and career EMS professionals in Virginia. The project has two phases. The first phase is to conduct research to better understand the issues, problems and success stories of retention efforts both in Virginia and on a national level. This document reports the results of the research phase.

In the second phase, the insights from the research will be used to develop a retention "tool kit" to guide retention efforts. The tools in the tool kit will be comprised of structured, interactive learning experiences designed for use as part of the day-to-day operation of an EMS agency's business.

Why Focus on Retention?

Although EMS leaders often think about recruiting and retention together, given the limited time these leaders have to run their organizations, we believe it is more cost effective to focus *first* on keeping good people and *second* on finding, training and integrating new people into an agency. As the Federal Emergency Management Agency and United States Fire Administration states in their Emergency Medical Services (EMS) Recruitment and Retention Manual, "The best recruitment program is of little value if the organization cannot retain its members."

Stated another way, the Pennsylvania Emergency Health Service Council, EMT and Paramedic Committee states in their Recruitment and Retention Resources Guide, "Recruiting is a personnel and organizational investment for the future. Retention is the ability to maximize that investment."

Research Methodology

Three different approaches were used to gather data during the research phase of the project.

- Demographic Research This research used the Virginia Department of Health, Office
 of Emergency Medical Services databases, the Bureau of Labor Statistics research,
 Census Bureau 2000 data, the Virginia Employment Commission research, and recent
 articles and publications on retention.
- Benchmarking 12 EMS leaders representing 39 agencies were interviewed to determine retention practices and approaches. The survey data form used during the interviews is enclosed in Appendix I.
- **Focus Groups** 3 focus group meetings were held around Virginia in an attempt to understand retention issues at all levels in an organization.

Summary of Retention Issues

Our research confirms that recruiting and retention of both volunteer and career professionals are consistently viewed as long-term problems that are getting worse. The most often mentioned sources of these problems are:

- Time Demands on Volunteers Volunteers have less time available for public service due to the demands of dual income and single parent families along with working multiple jobs.
- More Demanding Training Requirements Training demands are increasing due to:
 - Higher training standards and new federal requirements (homeland security)
 - Recertification
 - Expectations by the public for broader services (cave and water rescue, hazmat, etc.)
- Increasing Emergency Call Volumes Increasing call volumes are driven by:
 - Population growth
 - Growth in the number of residents age 65 and older
 - Greater reliance on 911 as the first medical service used instead of hospitals or doctors
- Leadership Quality and Continuity More demands are being placed on agency leaders to:
 - Exhibit flexible leadership styles to create an agency culture matching the needs of new volunteers
 - > Develop leaders and key professionals for growth and continuity
 - Manage larger and more complex organizations
 - > Lead the transition from volunteer to career professional staff
- Changing Nature of The Business The business of emergency medical services is transforming due to:
 - Moving to fee for service and other funding source changes
 - Moving from independence of action to interdependence with other service providers
 - Increasing public expectations for higher standards of service
 - Transitioning from volunteer to career staffing
 - Adjusting to the shrinking of the traditional pool of EMS volunteers 16 34 years old
 - ➤ Retiring "Baby Boomers" and Integrating Generation X & Y volunteers

Principles of Retention

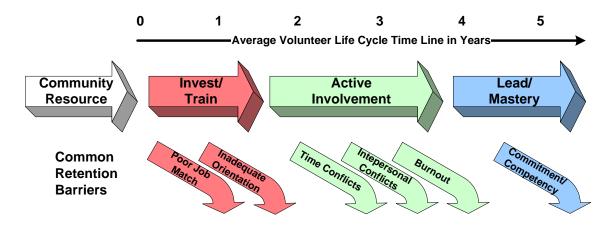
Taken together, the long list of retention issues presents a dynamic and complex picture of the problems associated with keeping EMS professionals. One way to better understand retention is to take a high level view and look for principles that can be applied across issues.

We have identified four principles that we feel best guide leaders in developing successful solutions.

- 1. The life-cycle of retention model
- 2. Achievement
- 3. Affiliation
- 4. Personal relationships

Life-Cycle of Retention Model

The model states that professionals go through a predictable "life-cycle" in their tenure at an agency, and taking specific actions at each stage in this life cycle improves retention. The model below identifies the four major steps in the life cycle.



Simply stated, in the first step (Community Resource), professionals come from the local community and join an agency. In the second step (Invest/Train), professionals go through training and are prepared for service. This phase can last from 7 to 18 months. The major retention barriers in this step are a poor job match and inadequate orientation.

In the third step, professionals become actively involved in delivering the service. This step lasts from 1 to 4 years, on average, and should be a time of high job performance that leads to high job satisfaction and reinforces their commitment to the agency. The major barriers to retention are time conflicts with work, family or school, interpersonal conflicts with other members and job burnout.

In the fourth step (Lead/Mastery), the professional decides if he/she is going to become more deeply involved in the agency by taking on a leadership role or developing a higher level of technical mastery. This phase lasts, on average, from 4 to 7 years with the major barriers being sustaining a deeper level of commitment to the organization and developing the competencies to lead or gain technical mastery.

Achievement

The achievement principle states that EMS professionals are more likely to stay if they are successful in the job and are able to reach personal goals.

Affiliation

The affiliation principle states that EMS professionals are more likely to stay if they have a sense of being part of a team or family. They must feel that they "belong."

Personal Relationships

The personal relationships principle states that EMS professionals are more likely to stay if they establish strong personal relationships with others at work.

Retention strategies that use one or more of these principles will be the most effective.

Summary of Findings

The findings are presented in a workforce planning context that seeks to understand:

- The current and future demand for EMS professionals,
- The current and future supply of EMS professionals,
- The gaps between demand and supply, and
- The implications of supply and demand gaps for the management of the retention process.

EMS Professionals Demand

The research reveals that the demand for EMS professionals in Virginia will continue to grow driven by population growth and the growth of residents, age 65 and older. For the ten year period from 2000 to 2010 Virginia's population is projected to grow by 12%, and residents 65 years of age and older are projected to grow at 28%. While the age 65 and older population segment comprises only about 11% of the population, the aging baby boomers will likely have more medical emergencies and may demand a higher level of service.

Population growth rates can be used as a proxy for emergency call growth rates. National call volume statistics for 2002 indicate that the average yearly call volume per one million of population was 109,356. Based on Virginia's estimated population of 7,078,494 in 2000, call volumes for that year are estimated at 774,076. If call volumes grow at the rate of estimated population growth (12%), call volumes will reach 866,964 by 2010, a 92,888 increase.

EMS Professionals Supply

The research reveals that volunteers dominate as providers of EMS services. The Office of Emergency Medical Services (OEMS) records show that 51% of the 24,366 certified EMS professionals affiliated with an agency are volunteers. The next largest group is local governments with 39%.

In terms of competencies, 67% of all certifications are Emergency Medical Technicians (EMTs). The next largest group is Paramedics at 11%. The Bureau of Labor Statistics projects that there will be an increasing demand for EMS professionals as agencies transition from volunteers to full-time paid EMTs and paramedics.

Demand – Supply Gaps

Because the traditional pool of 16-34 year old volunteers is decreasing, there will be a demand – supply gap in counties experiencing high growth. While the overall projected growth from 2000 to 2010 for this age segment in Virginia will grow 8%, this is below the 12% growth for the total population. In 60% of all Virginia counties the 16-34 year old segment will grow less than the population as a whole.

The demand – supply gaps will likely be made more severe because volunteers in general have less time available to devote to community service. One of the drivers of this change is the decline of the traditional family in which only the husband is in the labor force.

An article published in the Monthly Labor Review in 1990 shows that the combination of dual-worker families and families maintained by a single women or man now dominate over the traditional family. Another driver is the difficulty workers have in getting time off from work. As Americans work longer hours and must drive longer distances to work, being available to participate in calls during the day becomes more difficult.

Finally, EMS agencies may be at a competitive disadvantage with other community volunteer agencies because of the high level of commitment required both in terms of certification and long hours staffing shifts.

Implications for Retention

The major implication for retention is that these demand – supply gaps place more pressure on agencies to keep good people longer. A second implication is that traditional methods of managing and responding to professionals' needs will likely be less effective in the future, especially with Generation X & Y members. More flexibility and innovate approaches must be tested to find the ones that work best for each agency.

Our contact with benchmark agencies reveals that many agencies have taken on the challenge of improving their retention process. The agencies that seem to be doing the best are taking a proactive rather than a reactive approach to improving retention and use more than one program or strategy. As we probed more deeply on which retention efforts seemed to be working best, three themes emerged.

- The importance of high quality, easily accessible, no or low cost training. —
 Benchmark agencies employ training innovations like on-line training, frequent on-site
 training or half-day weekend training to accommodate the time restraints of volunteers.
 At the same time care was taken to ensure that the quality of training remained high and
 topics covered were of interest to the volunteer and motivated continued involvement.
- The importance of creating and sustaining a team and family feeling within the agency's culture As discussed in the principles section, satisfying affiliation needs of members was seen as critical to retaining volunteers. Social activities such as cook outs and picnics that involved the member's family were viewed as helpful in retention along with attracting other family members to join the agency. Benchmark agencies also offered activities that appeal to younger volunteers. For example, agencies have installed an Xbox system in the station, provided free use of washing machines and use of an agency owned truck when a member needed to move. One female agency leader has created a family environment to the extent at younger members refer to her as "Mom."
- The importance of flexibility to better meet the needs of professionals Many agencies have become quite creative in flexing their leadership style and business operations to meet professional's needs. These actions range all the way from allowing on-line shift scheduling to providing sabbaticals for volunteers who need time to change jobs, recover from a divorce, birth of a child or a death of loved ones. For current members who had less time to serve, some agencies reduced the number of hours required to be considered "active" or scheduled these volunteers to take on non-patient activities such as agency administration, equipment maintenance or fundraising.

This flexibility, however, comes at a price. It increases the complexity of the organization, requires more time coordinating activities and more time in two-way communication.

On the following pages we offer recommendations based on the insights gained from our research.

Recommendations

Based on the research, two recommendations have been made to aid the development of the retention tool kit.

- Identify unique agency market segments to focus tool development.
- Develop tools for the four market segments identified.

Each recommendation is discussed in detail below.

Recommendation #1 – Identify unique agency market segments to focus tool development.

The purpose of market segmentation is to help define important EMS groups that may have different needs relative to retention strategies and tools. Focusing on the needs of distinct groups helps to lessen the chance that tools will be developed with too broad a scope and not address specific, identified needs.

The market segments outlined below are all within the fire and/or rescue function. This segment was chosen because it is the largest functional category with 78% of all agencies and 88% of all current EMS certifications.

	#	#
Functional Category	Agencies	Certifications
Ambulance	41	555
Commercial Other	17	223
Federal	17	618
Fire and/or Rescue	562	21,502
Gov. Other	14	96
Hospital	8	37
Industrial	27	673
Public Safety	9	392
Transportation	30	270
Grand Total	725	24,366

Four market segments have been identified within the fire and/or rescue function.

- 1. Backbone Agencies
- 2. Growth Agencies
- 3. Foot Soldier Agencies
- 4. Paramedics

Backbone Agencies – This segment is comprised of volunteer and local government fire and/or rescue agencies with between 11 – 35 EMS professionals. There are 298 agencies in this market segment with 8,561 EMS professionals. With 53% of the agencies in this function and 40% of the certified professionals, they provide the backbone of fire and rescue service in Virginia.

Selected Demographics	Data	Comments
Agency Size	28.7	Average # professionals certified
Estimated 2004 Turnover	11.6%	Based on # of 2004 certifications, annualized
Avg. Pop Growth	7.8%	City or county.
Avg. 65+ Growth	25.4%	City or county.
Avg. 16-34 Growth	10.2%	City or county
Cities	9.4%	% of Agencies
Rural Counties	82.6%	% of Agencies
Urban Counties	8.1%	% of Agencies
(Cas the Cities Haber and Du		line definitions on many 47\

(See the Cities, Urban and Rural counties definitions on page 17)

Perceived Needs

Because of moderate population growth rates and moderate estimated 2004 turnover rates, these agencies may not perceive retention to be a serious problem. It is likely that retention will only become an issue when an agency loses key EMS professionals or has unexpected turnover in leadership. Therefore, the need for help in retention will be driven by events. Leaders in this situation may find value in:

- An audit of their current retention efforts to identify areas of strength and weakness
- A problem solving guide that can be used to solve specific event driven problems.

Growth Agencies –This segment is comprised of government and volunteer fire and/or rescue agencies that are projected to experience high growth in both the general population and in age 65 and above residents. There are 144 agencies in this market segment with 8,478 EMS professionals.

Selected Demographics	Data	Comments
Agency Size	58.9	Average # professionals certified
Estimated 2004 Turnover	13.1%	Based on # of 2004 certification, annualized
Avg. Pop Growth	27.8%	City or county.
Avg. 65+ Growth	70.6%	City or county.
Avg. 16-34 Growth	25.2%	City or county
Cities	7.6%	% of Agencies
Rural Counties	48.6%	% of Agencies
Urban Counties	43.8%	% of Agencies
(See the Cities Urban and Ru	iral count	ties definitions on nage 17)

(See the Cities, Urban and Rural counties definitions on page 17)

Perceived Needs

These agencies will feel the pinch of increases in the number of emergency calls and higher member turnover. Larger urban agencies will already have established retention programs and may also have someone who spends all of their time on recruiting and retention. Rural agencies may need help in devising more effective retention strategies to deal with a more complex business environment. All agencies may be experiencing difficulty in integrating career and volunteer members.

Foot Soldier Agencies – This segment is comprised of fire and/or rescue agencies with little or no population growth (bottom quartile of cities/counties in growth) and with little or no turnover in EMS personnel (bottom quartile of agencies in estimated turnover). These agencies are also likely to experience a shrinking pool of 16 – 34 year olds. There are 68 agencies in this market segment with 1,847 EMS professionals.

Selected Demographics	Data	Comments
Agency Size (Avg. # Certified)	27.2	Average # professionals certified
Estimated 2004 Turnover	0%	Based on # of 2004 certification, annualized
Avg. Pop Growth	-0.3%	City or county.
Avg. 65+ Growth	4.3%	City or county.
Avg. 16-34 Growth	-0.1%	City or county
Cities	30%	% of Agencies
Rural	70%	% of Agencies
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(See the Cities, Urban and Rural counties definitions on page 17)

Perceived Needs

Leaders in these agencies are likely faced with revitalizing their membership and keeping enough new members to protect continuity of service.

Paramedics – Next to EMTs, this is the second largest EMS certification group. This group is comprised of 2,279 professionals in 283 fire and/or rescue agencies. While this group makes up only 10.6% of all fire and/or rescue professionals, they are a critical resource for providing higher levels of service to the community. Because volunteer paramedics often move on to career professional positions with local governments, their retention in volunteer agencies is becoming more difficult and their loss is more immediately felt. In addition, local government agencies report that paramedics tend to move more often between agencies than other professionals.

Selected Demographics	Data	Comments
Average Age	38.9	
Male Gender	79.2%	
Cities	38.7%	
Rural Counties	17.4% %	6 of all Paramedics
Urban Counties	44.0% %	6 of all Paramedics
(See the Cities, Urban and Rur	al counties	definitions on page 17)

Perceived Needs

Agency leaders are caught in a situation where the demand for paramedics is increasing faster than the supply. The Bureau of Labor Statistics projects that demand for full-time EMTs and paramedics is expected to "grow faster than the average for all occupations through 2012." Retention efforts will likely be on improving salary and benefits and providing stronger career progression. The Bureau of Labor Statistics (2000) reported that the median salary for EMTs and Paramedics was \$22,460. On the other hand, A Journal of Emergency Medical Service 2000-2001 salary survey reported that the *average* paramedic salary was \$38,000. It is assumed that the median salary is lower than the average in this study.

As a comparison, the Bureau of Labor Statistics figures for 2000 are shown below.

Comparison Positions	Median Salary
Firefighters	\$29,316 - \$39,477
Police	\$39,790
Registered Nurses	\$44,840
Physician Assistants	\$61,910

In the Longitudinal Emergency Medical Technician Attribute and Demographic Study (LEADS) interim report in 2000, it was reported that less than half (47.2%) of the paramedics were satisfied with their opportunities for advancement, and 92.3% of the paramedics felt that opportunities for advancement were moderately or very important. This gap between advancement satisfaction and importance can be a substantial barrier to retention.

Recommendation #2 – Develop tools for the four market segments identified.

Tool Development Assumptions

The assumptions outlined below have been made to guide tool development.

- 1. Tools will have more value if they can be used on-the-job vs. only in the classroom.
- 2. Information must be presented in short segments because of the limited time volunteers have to work with them.
- 3. Because we are dealing with adult learners, the concepts and suggestions should be presented so that the learner decides what actions to take rather than being told what is "right" or "wrong."
- 4. On sections presenting new information, the learner should be
 - Given "real" examples with which to work,
 - Allowed to practice responses, and
 - Presented with a helpful critique.
- 5. The tools will have more value if they address the needs of specific market segments.
- 6. The tools have to foster action. The learner cannot just make a "quick read" of the materials and assume he/she understands the principles, strategies and practices introduced.
- 7. The demographics of the average learner are assumed to be:
 - Predominately male, 35 45 years old
 - Officer in the agency's organization
 - At least 3 years experience in EMS
 - Some experience and training in supervision, management and leadership
 - Hands on problem solvers who may not always identify and understand systemic problems

Market Segment Needs

Based on our research to date, listed below are the assumed needs of the four market segments. Market segment needs will be confirmed as part of the tool development process. (For a discussion of each segment, please see the Recommendations section.

Market Segments	Retention Needs
Backbone Agencies	 Development of a retention plan if one is not in place. Audit of the current retention process. Integrating Generation X and Y volunteers. Review of retention principles and how they can be applied on the job.
Growth Agencies	 Meeting growth in call volumes without creating burnout. Leading a larger, more complex organization in retention practices. Preparing for the transition from all volunteer to career professionals. Audit of the current retention process.
Foot Soldier Agencies	 Revitalizing long service professionals. Integrating Generation X and Y volunteers. Audit of the current retention process.
Paramedic	 Developing a paramedic compensation and benefits philosophy (total compensation). Using career development as a retention tool. Audit of the current retention process.

Potential Tools

Principles of Effective Retention – This workbook guides leaders through the introduction, practice and application of basic retention principles. It also contains a retention audit to help leaders assess the health of their current process.

Retaining Key Professionals During Growth and Transition – This workbook helps leaders anticipate and avoid retention problems driven by growth and workforce transitions.

Retention Problem Solving – This workbook helps leaders identify and solve specific retention problems. 10 – 15 specific retention problems will be identified with suggested solutions.

Extending the Paramedic Life-Cycle Through Career Development – This workbook helps leaders use a development approach to retaining paramedics.

Research Methodology

Three different approaches were used to gather data during the research phase of this project.

- Demographic Research This research used the Virginia Department of Health, Office of Emergency Medical Services databases, the Bureau of Labor Statistics research, Census Bureau 2000 data, the Virginia Employment Commission research, and recent articles and publications on retention.
- Benchmarking 12 EMS leaders representing 39 agencies were contacted and interviewed to determine what retention practices seem to be working best for them. We have refrained from calling these results "best practices" since a best practice for one agency might not work at all for another. Interview comments were collected using a survey format (Appendix I).
- Focus Groups 3 focus group meetings (shown below) have been held around Virginia in an attempt to understand retention issues at all levels in an organization. Focus group meetings will continue through out the tool development process.
 - > VAVRS Annual Conference Regional VP and selected other participants
 - Huddleston Rescue Squad, Bedford County Virginia
 - Recruitment and Retention Coordinators October meeting

Analysis Factors

Eight factors were developed to assist with the demographic analysis.

- Functional Category Two functional categories were used to identify the primary function of the agency. The first designation is based on the categories used in the OEMS database.
 - Commercial EMS
 - Federal Government
 - Government (Local)
 - Industrial Firms
 - Non-Profit
 - Volunteer

The second designation is an estimate of function based on agency name.

- Ambulance
- Commercial EMS Other
- Federal Government
- Fire and/or Rescue
- Government Other (Non EMS)
- Hospital
- Industrial Firms
- Public Safety
- Transportation Firms

The number of agencies in each category is shown below.

	OEMS Category						1
Functional Category	Commercial	Federal	Government	Industrial	Non-Profit	Volunteer	Grand Total
Ambulance	40				1		41
Commercial Other	13				4		17
Federal		17					17
Fire and/or Rescue			66	i	3	493	562
Gov. Other			14				14
Hospital	4		2		2		8
Industrial			1	26			27
Public Safety			9				9
Transportation	30						30
Grand Total	87	17	92	26	10	493	725

- 2. **Population Density** Based on the 2000 population densities per square land mile, the agencies have been categorized as Cities, Urban Counties or Rural Counties.
 - Cities This designation was given to 39 Virginia cities regardless of population densities. City population densities ranged from 159 to 8,452.
 - **Urban Counties** Counties with 180 or more residents per square land mile.
 - Rural Counties Counties with less than 180 residents per square land mile.

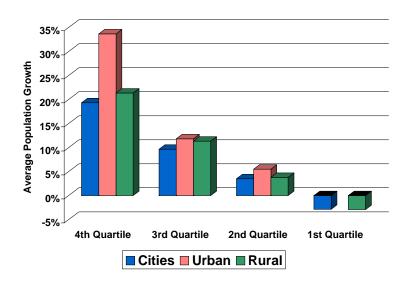
The demographics of the categories are shown below.

_	Pop. /Sq. Land Mile	# Cities/ Counties	# Agencies
Cities	2,102.7	39	139
Urban Counties	672.7	13	112
Rural Counties	68.8	82	474
Grand Total	552.0	134	725

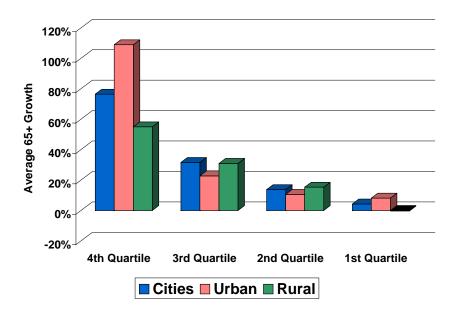
3. **Agency Member Size** – The size of the agency was estimated by the number of EMS professionals currently certified as of the end of August 2004 in the OEMS database and affiliated with an agency. The average agency size is 33.6 EMS professionals. There is a large variation in the average agency size as shown below.

Category	Average
Cities	54.4
Urban Counties	72.1
Rural Counties	18.4
Grand Total	33.6

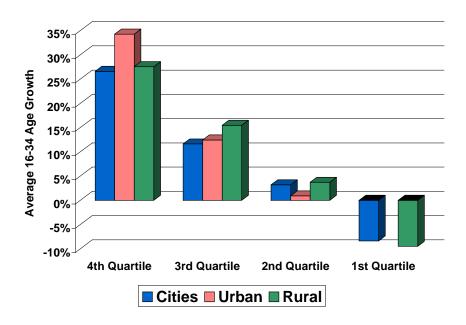
4. **City/County Population Growth Rates** – Based on the estimated population growth from 2000 to 2010, the Virginia cities and counties have been assigned a quartile ranking. Below are the average population growth rates for the cities, urban, and rural categories.



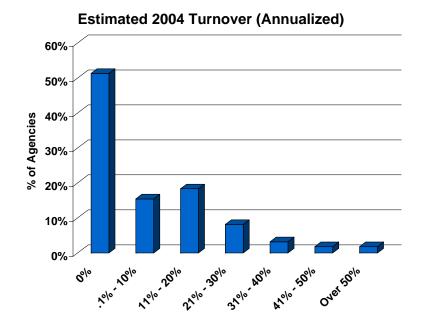
5. **City/County Age 65+ Growth Rates** - Based on the 2000 – 2010 estimated growth of Virginia residents ages 65 years of age and older, the cities and counties have been assigned a quartile ranking. Below are the average age 65 and older growth rates for the cities, urban, and rural categories.



6. City/County Age 16 – 34 Growth Rates - Based on the 2000 – 2010 estimated growth rate of residents between the ages of 16 - 34, the cities and counties have been assigned a quartile ranking. Below are the average population growth rates using the cities, urban, and rural categories.



7. **Turnover Rates** – To estimate agency turnover the number of new certifications for 2004 (through August) have been used to represent replacements of resignations. This approach yields the following distribution of annualized agency 2004 turnover.



Based on population density categories, city agencies have the lowest estimated turnover rate with urban agencies having the highest.

Functional Categories	Cities	Rural	Urban	Grand Total
Ambulance	3%	4%	0%	4%
Commercial Other	14%	0%	0%	9%
Federal	1%	4%	2%	3%
Fire &/or Rescue	8%	10%	14%	11%
Gov. Other	0%	0%	0%	0%
Hospital	0%	0%		0%
Industrial	3%	11%	2%	6%
Public Safety		4%	10%	5%
Transportation	0%	0%	2%	0%
Average	6%	9%	11%	9%

It should be noted that antidotal information from agencies places turnover much higher at between 16% - 25% for volunteers. Turnover rates were the most difficult to collect and understand, and this data should be used with caution.

8. **Certifications** – OEMS tracks individuals who obtain certifications for different levels of EMS proficiency. The following certifications are currently granted.

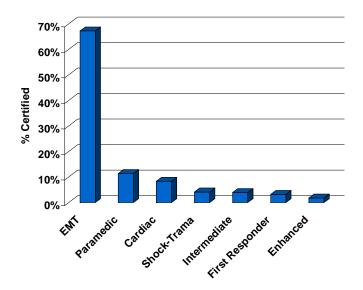
Two levels of Basic Life Support (BLS) certification

- First Responder This requires a minimum of 40 hours of classroom and clinical instruction. This certification is for individuals who may be the first to arrive at the scene (law enforcement, fire), but it is not intended for EMS professionals.
- Emergency Medical Technician (EMT or EMT-B) This requires a minimum of 121 hours of classroom and clinical instruction.

Five Levels of Advanced Life Support (ALS)

- **EMT-Enhanced** This requires a minimum of 120 hours of instruction in addition to the EMT-Basic certification.
- EMT-Cardiac Technician (To be phase out in 2008; replaced by EMT-Enhanced)
- **EMT-Intermediate** This requires a minimum of 272 hours of instruction in addition to the EMT-Basic certification.
- Shock Trauma Technician (To be phase out in 2008; replaced by EMT-Intermediate)
- EMT-Paramedic This is the highest level of EMS certification and requires a minimum of 778 hours of training in medical, trauma, pediatric, and geriatric emergencies in addition to EMT-Basic.

There are 24,336 individuals currently certified and affiliated with a primary agency in Virginia. The graph below shows the distribution of these categories.



Findings

Based on the research phase nine finding have been identified.

- 1. The demand for EMS professionals will continue to grow driven by population growth and the growth of Virginians age 65 and older.
- 2. Volunteer agencies dominate as providers of EMS services.
- 3. Emergency medical technicians dominate certification categories.
- 4. The traditional pool of 16 34 year old volunteers is decreasing.
- 5. There is less time available to volunteer.
- 6. There is increased competition for available volunteers.
- 7. EMS professional turnover rates are not well tracked or documented.
- 8. Training is both a barrier to and an enabler of retention.
- 9. Benchmark agencies used more than one program to address retention.

Each finding is discussed in detail on the following pages.

Finding #1 - The demand for EMS professionals will continue to grow driven by population growth and the growth of Virginians age 65 and older.

For the ten year period from 2000 to 2010 Virginia's population is projected to grow by 12%, and residents 65 years of age and older are projected to grow at 28%. Shown below are the 15 counties and 5 cities that have the highest combination of population and age 65 and above growth rates. The counties and cities are presented in alphabetical order.

	2000 -	2010		2000 - 2010		
County Pop. Growth 65+ Growth		City	Pop. Growth 65+ Growth			
Bedford	15.0%	63.0%	Fairfax City	7.0%	34.8%	
Chesterfield	21.6%	72.4%	Falls Church City	9.9%	47.5%	
Fairfax	15.5%	51.6%	Manassas City	19.3%	104.3%	
Fauquier	23.7%	53.2%	Manassas Park City	29.3%	124.2%	
Fluvanna	40.2%	61.5%	Suffolk City	22.2%	73.0%	
Goochland	26.9%	58.7%				
King George	20.8%	55.1%				
King William	17.1%	49.8%				
Loudoun	53.3%	143.4%				
New Kent	20.3%	73.2%				
Powhatan	33.6%	103.6%				
Prince William	27.5%	118.8%				
Spotsylvania	38.3%	71.9%				
Stafford	38.4%	124.8%				
York	22.2%	58.2%				

Implications

Transportation

Grand Total

% of Total

270

957

4%

618

3%

As the population ages, particularly the 65 and over segment, agencies will experience an increase in call volumes resulting in greater demands on the EMS workforce. Agencies can respond by either becoming more effective in their operations and/or recruiting more volunteers. High growth agencies that choose to increase recruiting efforts at the same time as dealing with increased call volumes will likely have less time to recruit and train new volunteers. The result may be that the current staff will be required to cover more calls, resulting in increasing levels of volunteer burnout and turnover.

Finding #2 - Volunteer agencies dominate as providers of EMS services.

Volunteer fire and/or rescue agencies contain 51% of all certified EMS professionals as shown below.

OFMS Category

9,616

39%

			OLIVIS C	ategory				
Functional Category	Commercial	Federal	Government	Industrial	Non-Profit	Volunteer	Grand Total	% of Total
Ambulance	547				8		555	2%
Commercial Other	119				104		223	1%
Federal		618					618	3%
Fire &/or Rescue			9,111		81	12,310	21,502	88%
Gov. Other			96				96	0%
Hospital	21		3		13		37	0%
Industrial			14	659			673	3%
Public Safety			392				392	2%

659

3%

270

24,366

12,310

51%

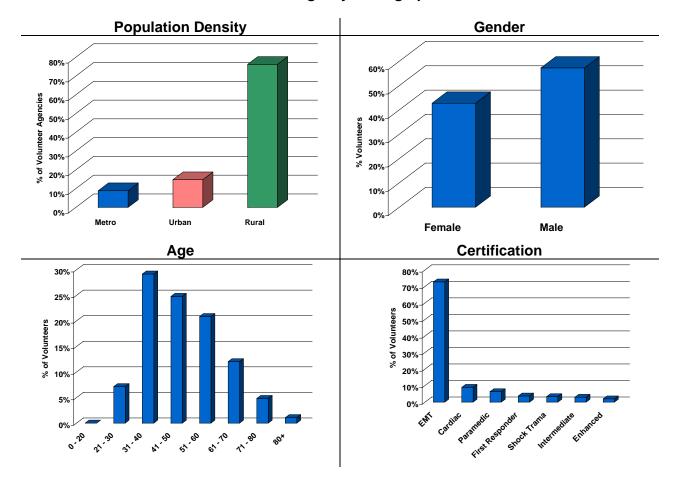
206

1%

1%

76% of the volunteer agencies are in rural counties. 43% of the volunteers are female and the average age is 37 years old. 73% hold an EMT certification.

Volunteer Agency Demographics

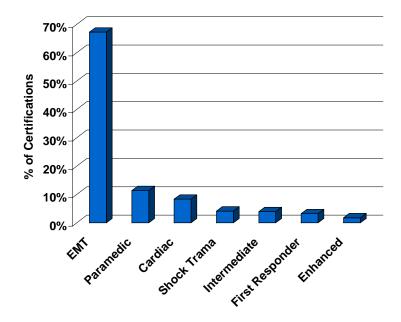


Implications for Retention

Because of the large number of volunteers (especially in rural areas), the anticipated transition from volunteers to paid professionals may take longer than expected. Because volunteers are not paid for their services, their motivation to stay will continue to be an important focus for agency leaders. Agencies may need to more fully understand the psychological factors of greatest importance to their volunteers, especially those held by Generation X and Y members.

Finding #3 - Emergency medical technicians dominate certification categories.

EMTs account for 67% of all certifications. The second largest category is Paramedics at 11%



The EMT-B certification requires a minimum of 121 hours to complete, and this is a considerable amount of time for a volunteer to invest especially at the start of their EMS service. This may explain why volunteers do not invest in higher levels of certification requiring even greater time commitments.

Dominance of the EMT certification is also important if an aging population requires higher levels of emergency service. Agencies may not have the skills sets needed to meet this new level of service.

Finding #4 - The traditional pool of 16 – 34 year old volunteers is decreasing.

While the overall projected growth from 2000 to 2010 for this age segment in Virginia will grow 8%, this is below the 12% growth for the total population. In 60% of all Virginia counties the 16 – 34 year old segment will grow less than the population as a whole.

The cities and counties most affected by this population shift are shown below in alphabetical order.

2000 -2010				2000 -	2000 - 2010		
Counties	16 - 34 Growth	Pop. Growth	City	16 - 34 Growth	Pop. Growth		
Brunswick	-13%	2%	Bristol City	-14%	-3%		
Buchanan	-16%	-10%	Buena Vista City	-17%	-4%		
Buckingham	-5%	9%	Danville City	-9%	-6%		
Charles City	-1%	7%	Emporia City	-19%	-3%		
Charlotte	-2%	4%	Martinsville City	-12%	-3%		
Dickenson	-20%	-5%	Norfolk City	-10%	-3%		
Giles	-2%	1%	Petersburg City	-18%	-10%		
Henry	-13%	-6%	Poquoson City	-9%	4%		
King William	-7%	17%	Portsmouth City	-12%	-3%		
Lee	-4%	-5%	Richmond City	-13%	-3%		
Lunenburg	-5%	2%	Staunton City	-17%	-6%		
Mathews	-3%	6%					
Mecklenburg	-11%	1%					
Page	-11%	4%					
Patrick	-2%	3%					
Pittsylvania	-1%	3%					
Pulaski	-14%	-3%					
Russell	-16%	3%					
Scott	-8%	0%					
Sussex	-5%	-4%					
Tazewell	-8%	-4%					
Warren	-3%	15%					
Washington	-7%	3%					
Wise	-10%	-3%					

Implications for Retention

In cities and counties experiencing high levels of growth, agencies may find it more difficult to recruit from a shrinking pool of potential volunteers, and retention of the current workforce will become even more important. Non-traditional sources of new volunteers may need to be explored, especially minorities. Minorities are under utilized in most communities even as the minority population continues to grow at rates faster than the non-minority population. The Census Bureau reports that the U.S. minority population will account for nearly 90% of the total growth in the U.S. population from 1995 to 2050. By 2025 Virginia will rank 17th among all states in minority population with 35%.

Finding #5 - There is less time available to volunteer.

One of the drivers of this change is assumed to be the decline of the traditional family in which only the husband is in the labor force. An article published in the Monthly Labor Review in 1990 shows that dual-worker families and families maintained by a single women or man now dominate. Another driver is the difficulty workers have in getting time off from work. As Americans work longer hours and must drive longer distances to work, being available to participate in emergency calls, especially during the day, becomes more difficult.

A Bureau of Labor Statistics News release in December 2003 reported that 44.7% of those who volunteered in the U.S. in the past year listed *lack of time* as the reason for not volunteering now. A 1998 study on volunteers, sponsored by United Parcel Service, reported that 65% of volunteers surveyed had stopped volunteering because of "demands on time."

Implications for Retention

Given that certification and training requirements will require more time in the future, this trend may result in more volunteers leaving agency service. Benchmarked agencies are already adjusting to this trend by developing flexible approaches to working with volunteers such as breaking up training into smaller amounts of time or using technology to make some business operations easier for volunteers to use.

Finding #6 - There is increased competition for available volunteers.

Although the Bureau of Labor Statistics estimates that about 29% of the American population volunteers, studies report that there is a shift away from community oriented groups to cause oriented groups. These groups may ask for less time or may focus on a single event as opposed to continuous service. The Bureau of Labor Statistics News 2003 release indicated that volunteers were involved in the following activities:

Activity	% Of	
	Volunteers	
Religious	34.6%	
Educational/youth related	27.4%	
Social/Community service organizations	11.8%	
Hospitals or other health organizations	8.2%	

Implications for Retention

Increased competition will impact recruiting of new volunteers, especially when competing groups ask for less time. Current volunteers may leave EMS service to join community organizations that can be more flexible in meeting their needs. In response to this issue, some agencies have redefined the standards for involvement by reducing the number of hours per month required to be considered an "active" volunteer.

Finding #7 – EMS professional turnover rates are not well tracked or documented.

EMS professional turnover has been difficult to estimate. Turnover rates are an effective measurement of retention. Given that retention is a critical issue facing EMS agencies, it is surprising that more attention has not been placed on determining turnover.

National estimates put it at between 16% - 25% for EMTs and 5% - 9% for Paramedics. Interviews with selected Virginia agencies indicated that turnover averaged 19% for volunteers and 11% for career professional.

Using the OEMS database on certifications, 2004 turnover is estimated at 11% (Annualized) for EMS professionals in fire and/or rescue squads.

The LEADS study by the National Registry of Emergency Medical Technicians reports that the *median* years of experience for EMTs is 2.2 years and 9.1 years for Paramedics.

Implications for Retention

Turnover rates are an important measure of retention. To make progress on retention efforts agencies may need to take a more disciplined approach to tracking turnover rates to determine if current retention efforts are effective.

Finding #8 – Training is both a barrier to and an enabler of retention.

Barriers

Studies report that the time and expense of training is a barrier to attracting and retaining EMS professionals. As more formal training is required, volunteers' initial enthusiasm may be lost due to the delay in starting to participate in emergency calls. Our benchmark agencies report that, on average, seven months is required to prepare a volunteer to perform all aspects of their job.

Also, some volunteers are not good at taking written tests and may quit rather than be humiliated by failing a test. In one study by the University of Illinois, 55% of rural EMS volunteers quit because of training requirements.

The Old Dominion EMS Alliance Region reported in a 1999 study that volunteers expressed disapproval with the locations and availability of training.

Enablers

Studies also report that training can be an enabler of retention, especially if it is of high quality and easily accessible. Training is also seen as an enabler in our benchmark research. Training programs may need to be designed with offerings important to the volunteer. Some agencies found that offering exciting training with an element of competition, such as cave and tunnel rescue, was helpful in keeping their current workforce motivated.

Implications for Retention

Volunteers state that reducing the time and effort to become certified would be helpful in retaining EMS volunteers. Because meeting these standards are prerequisites for an agency to stay in operation, benchmark agencies have reduced some barriers by providing no cost or low cost training, frequent training on site and reimbursement for training transportation and travel.

Finding #9 – Benchmark agencies used more than one program to address retention

Survey participants were asked to rate (on a five-point scale with low success = 1 and highly successful = 5) the effectiveness of 18 retention programs often mentioned in the literature. The percent shown below is the number of participants who used the program and who rated it high (4 or a 5). The programs are shown in rank order from highest to lowest.

Retention Program	% Rated High
Addressing "honeymoon blues"	100%
Competency based pay	100%
Social functions	100%
New professional orientation	91%
Orientation Training	91%
Providing more advanced training	83%
Mentoring new professionals	82%
Using team based decision making	82%
Addressing job stress issues	80%
Integration into the "team" or "family".	80%
Mentoring core competency professionals	75%
Flexible Scheduling	73%
Publicity for outstanding performance	73%
Special pay or benefits	73%
Coaching and performance feedback	64%
Connecting job performance to agency success	57%
Grooming for leadership	54%
Balancing agency service with home responsibilities	38%

Implications for retention

Based on the number of approaches to affect retention, it would appear to be a very complex problem. Because of this, agencies may want to test several approaches to find the ones that work for them. By testing new approaches, the agency gains the value of learning more about retention without committing scarce resources. Over time the agency should be able to build a group of programs that work well for them. Our benchmark agencies found that using more than one approach to retention was the most effective.

Retention Principles

Many of the retention studies we reviewed focused on retention practices rather than on retention principles. For our purposes

- Practices are what you do, actions you take.
- Principles are guiding ideas, theory and insights that support the formation of practices.

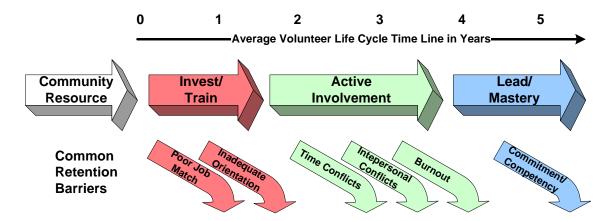
This difference is important since one retention practice may work well for one agency, but not work at all for another. Principles, however, can work well across many different agencies, and understanding the principles allows leaders to develop a set of successful practices unique to their organization.

Four principles of retention are introduced in this section.

- Life Cycle of Retention EMS professionals follow a life cycle in each agency they join with predictable needs at each point in the cycle.
- Achievement EMS professionals are more likely to stay if they are successful in the job and are able to reach the goals they set for themselves.
- Affiliation- EMS professionals are more likely to stay if they have a sense of being part of a team or family. They must feel that they "belong."
- Personal Relationships- EMS professionals are more likely to stay if they are able to establish strong personal relationships with others at work.

Life-Cycle Model of Retention

Professionals have a "life-cycle" in their agency, and taking specific actions at each stage in the life cycle improves productivity and job satisfaction resulting in improvement in retention. The model below shows the stages in a professional's life cycle.



- □ Community Resource This stage in the life cycle forms the beginning and the end of the model. It is the beginning because it is the source of potential professionals. It is the end, because it is the repository for EMS competencies that can be drawn upon. In a farming analogy, the community is like farmland to the farmer. Proper care and management of the land is necessary for a robust crop, year after year.
- □ Invest/Train During this stage, the professional is being trained and prepared for service. This is a time of high investment for both the professional and the agency. Turnover during this phase is "lose-lose" since both the professional and the agency lose their investment. It also impacts recruiting since the professional often shares his/her negative experience with the community.
- Active Involvement At this stage the professional is ready to be productive. For the professional it should be a time of high job satisfaction that reinforces their commitment to the job. Strategies at this phase focus on a balance between maintaining productivity and job satisfaction. Without proper attention by both the professional and the agency this phase may end in job burnout.

- □ **Leadership/Mastery** This is the last stage in the life cycle. Often, the professional must decide if he/she is ready to:
 - Move on to other types of public service,
 - Leave public service permanently,
 - > Take a break, be revitalized and return to service,
 - Move to part time service.
 - Commit to a leadership role, or
 - Invest in a higher level of certification

This is the second point in the life cycle where significant investment by both the agency and the professional must be made if the relationship is to continue. This phase is key in maintaining the "critical mass" of competencies and commitment needed to keep the agency healthy.

Achievement

Almost everyone wants to feel that they are winners and that they are part of a winning team. In the emergency medical business, achievement is often defined as "making a good call" or as helping others and being recognized by the person helped and by others as "doing a good job."

In addition, achievement may also mean that the EMS professional reaches important personal goals. This may include becoming more proficient as an EMS professional or using the experience as a volunteer to transition to a career professional. Given this need, successful learning experiences can be a powerful retention tool.

Achievement Needs Related to Retention

- Professionals stay if they are well matched to the job. Selective recruitment is a key factor in keeping professionals. "Post-honeymoon blues" are the result of a gap between the idealistic expectations of new professionals and the actual experience of EMS work.
- 2. Professionals stay if their tasks and procedures are clear.
- 3. Professionals stay if they receive feedback that connects their job to squad success. Professionals evaluate the investment they are making relative to the success they experience. If this "give/get" relationship is unbalanced, people tend to leave the organization.
- 4. Professionals are motivated by opportunities to learn new skills. Being given "busywork" is unlikely to promote feelings of achievement.
- 5. Professions are motivated by personal goals related to:
 - Opportunities to make a difference
 - Service to others
 - ➢ Help others in need
- 6. Professionals are motivated by performance-based rewards.

Affiliation

During the fall of the year, millions of Americans come together to root for "their" football team. They identify with their team by:

- Wearing the same colored clothes.
- Displaying the team's logo on their automobiles, baseball hats and clothing,
- Funding the team's activities, and
- Knowing the names of all the team members.

The affiliation need is so strong that many people will follow their team for their entire lives and some will even build their lives around it.

Peter Senge, author of *The Fifth Discipline Fieldbook*, highlights the global application of the affiliation need.

Among the tribes of northern Natal in South Africa, the most common greeting, equivalent to "hello" in English, is the expression: *Sawu Bona*. It literally means, "I see you."The order of the exchange is important; until you see me, I do not exist.Your identity is based upon the fact that you are seen – that people around you respect and acknowledge you as a person.

Affiliation Needs Related to Retention.

- 1. Volunteers stay if they feel welcome and appreciated.
- 2. Volunteers stay if they have a voice in the organization.
- 3. Volunteers stay when they feel they are treated consistently with dignity and respect.

Personal Relationships

While many leaders may be uncomfortable with using personal relationships as a retention principle, it is often the glue that holds organizations together. On the other hand, strong relationships in the group can lead to the formation of cliques, which can inhibit or block the integration of new members. Psychologists have found that what they call "sympathy groups" usually get no larger than 10 to 15 people. It is at this point that the emotional energy involved in keeping the relationships is exhausted. The implication for retention is that as the organization grows larger, more time and attention must be spent on relationship building and maintenance.

In our interviews with EMS professionals, creating a "family" feeling was seen as important to retention. Two aspects of this feeling are intimacy and trust. While the word intimacy may have sexual overtones, its use here involves honestly sharing feelings and information in an atmosphere of mutual self-disclosure. A wide range of feelings can be expressed in the squad. It can range from genuine caring which is often reserved for close friends to mutual respect for colleagues.

Trust involves being vulnerable and knowing someone well enough to let them use their skills, abilities and passions. It is about knowing someone well enough to rely on him or her to do the job and to do "the right thing." It also allows others to concentrate on what they do best.

Personal Relationships Related to Retention.

- 1. Professionals stay if they bond with someone within the organization. The ability to develop close friendships is an important factor in the level of commitment professionals give to the work.
- 2. Professionals stay if the agency creates a feeling of family and team and foster opportunities for intimacy and trust.

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Appendix I: Benchmarking Survey

Name of Intervi	Date of Interview Agency name No. of Agencies						
Position		Agency name				No. of Ag	gencies
Telephone no	Гelephone no			::			
Approximate no							
Approximate Po	opulation of co	verage ai	rea:				
Benchmarking (Questions						
	ous would you = not a signific						on a scale o
	he percent of vounpaid and care			-	•	ır agency?	Volunteer
3. What is the	he current turno	over rate o	of voluntee	and caree	r professio	nals?	
	w long does it oilities of the jo		in a volunt	eer so he o	r she can f	ully perfor	m all the
	w long does it oilities of the jo		in a career	profession	al so he or	she can pe	erform all the
6. What rete	ention activities	s or progra	ıms or initi	atives have	you tried	in your ag	ency?
7. What rete	ention program	s do you c	urrently ha	ve in place	and how	well are th	ey working?
	1 = Low succ	ess, $5 = H$	lighly Succ	essful, D=	Does Not	apply	
Retention P	rogram	1	2	3	4	5	D
New Profess Orientation	sional						
Orientation	training						
blues"	"honey-moon						
Coaching ar							
Mentoring r							

Retention Program	1	2	3	4	5	D
Mentoring core competency professionals						
Integration in to the 'team" or family"						
Connecting job performance to agency success						
Balancing agency service and home responsibilities						
Schedule flexibility						
Address job stress issues						
Using team based decision making for decisions that affect them						
Providing more advanced training						
Grooming for leadership						
Competency based pay						
Special pay or benefits						
Publicity for outstanding performance						
Social functions						

- 8. What approach(s) seem to work the best for you? Describe how the program works:
- 9. What did not work for you? Why?
- 10. If you could have help in only one area of retention what would it be?